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IS 7155 ( Part 7 ): 1990

## भारतीय मानक वाहक सुरक्षा के लिए अनुशंसित रीति संहिता

भाग 7 निरीक्षण और रख-रखाव

(पहला पुनरीक्षरा)

Indian Standard

# CODE OF RECOMMENDED PRACTICE FOR CONVEYOR SAFETY

PART 7 INSPECTION AND MAINTENANCE

(First Revision)

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

#### **FOREWORD**

This Indian Standard (Part 7) (First Revision) was adopted by the Bureau of Indian Standards on 20 February 1990, after the draft finalized by the Conveyors, Vertical Hoists and Bucket Elevators Sectional Committee, had been approved by the Heavy Mechanical Engineering Division Council.

The purpose of safety devices shall not be fulfilled until it is ensured that these remain in their best working condition. This can be accomplished by regular inspection and maintenance.

IS 7155: 1974 'Code of practice for conveyor safety' was published in 1974. Based on the experience gained in the field and to incorporate more specific safety requirements for various types of conveyors, the revision of IS: 7155 has been taken up in various parts.

This Part 7 of the standard is one of the series of Indian Standards code of recommended practice for conveyor safety. The other parts of the standard are:

- Part 1 General information
- Part 2 General safety requirements
- Part 3 Belt conveyors and feeders
- Part 4 Vibrating conveyor
- Part 5 Apron conveyors/apron feeders
- Part 6 Selection, training and supervision of operators

In the preparation of this standard reference has been made to AS CZ 15-1971 'SAA Conveyor safety code' issued by Standards Association of Australia.

### Indian Standard

# CODE OF RECOMMENDED PRACTICE FOR CONVEYOR SAFETY

#### PART 7 INSPECTION AND MAINTENANCE

### ( First Revision )

#### 1 SCOPE

1.1 This standard (Part 7) covers specific requirements of inspection and maintenance for conveyor safety. These requirements are in addition to the information and general safety requirements given in 18 7155 (Part 1): 1986 'Code of recommended practice for conveyor safety: Part 1 General information' and 18 7155 (Part 2): 1986 'Code of recommended practice for conveyor safety: Part 2 General safety requirements' respectively.

#### 2 SPECIFIC SAFETY REQUIREMENTS

2.1 Besides statutory and other requirements relating to inspection and maintenance of conveyor system, specific safety requirements relating to these aspects shall be observed particularly at the utilisation stage.

#### 2.2 Inspection and Maintenance Programme

An inspection and maintenance programme shall be planned, organized and implemented to keep the entire conveyor system in a safe operating condition.

**2.2.1** The inspection and maintenance programme shall include the various checks to be made, time schedule and the responsibility of personnel at various levels to implement the programme.

#### 2.3 Regular Checks

Those responsible for inspection and maintenance shall be thoroughly familiar with the recommendations made by the conveyor manufacturer and the inspection and maintenance programme (see 2.1).

- 2.3.1 Among other checks all take-up devices provided for the purpose of adjusting for stretch in the belt, chain or cable shall be checked for proper functioning periodically as per the time schedule decided in the inspection and maintenance programme (see 2.1.1).
- 2.3.2 All other pins, fasteners and couplings shall be checked periodically and carefully in

accordance with the inspection and maintenance programme (see 2.2).

2.3.3 Regular inspections shall be made and details recorded for future reference.

#### 2.4 Spare Parts

Depending upon the wear and other characteristics adequate spare parts shall be maintained for ready replacement.

#### 2.5 Lubrication

Inadequate or improper lubrication may lead to increased breakdown of the system/sub-system/component thus causing safety hazard. Particular attention shall be paid to lubrication schedules recommended by the manufacturer of conveyor and to the replacement of worn parts before they fail. The lubricant shall be of the type, grade, etc., recommended by the machine manufacturer.

#### 2.6 Removal of Guards

Where inspection or maintenance work entails the removal of guards, power shall be disconnected from the conveyor whilst this is being carried out and the control shall be locked in the 'off' position and an appropriate warning sign shall be secured to the controls. It shall be ensured that guards are replaced on the completion of inspection and maintenance work.

- **2.6.1** It is recommended that a 'DANGER' and 'OUT-OF-CONTROL' tag system be evolved.
- 2.6.1.1 Under normal circumstances when a person has tagged or locked out a control then it shall be the responsibility of that person to remove the tag and to re-set the control after the purpose for which these were used was accomplished.

#### 2.7 Safety of Personnel

Where inspection and maintenance personnel are required to work in situations where there is a risk of falling, consideration shall be given to the use of safety belts and harness assemblies.

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